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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,340	03/18/2005	Seiji Matsui	038-440-0122	4638
23428 7590 12/17/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER				
CHIAN, RICHARD				
ART UNIT		PAPER NUMBER		
2618				
MAIL DATE		DELIVERY MODE		
12/17/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/528,340

Applicant(s)

MATSUI ET AL.

Examiner

RICHARD CHAN

Art Unit

2618

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18 and 20 is/are rejected.
- 7) ☒ Claim(s) 17 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 12/03/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/15/08 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1-16, 18, and 20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honcharenko (US 6,349,217) in view of Ishikawa (US 5,666,655).

With respect to claims 1, 5, and 11 Honcharenko discloses the wireless apparatus, method, and program capable of supporting two types of modulation methods having different multi-value numbers Fig.8, comprising:

a modulation method switching unit Duplexer configured to switch, when another wireless apparatus to be in wireless connection with the wireless apparatus is capable of supporting said two types of modulation methods, the modulation method between a first modulation method having a smaller multi-value number and a second modulation method having a larger multi-value number, while the wireless apparatus is communicating with said another wireless apparatus; (Col.3 line 3-34)

a storing unit 42 configured to store a first threshold value of a parameter indicative of communication environment of transmission path, at which the wireless apparatus can communicate with said another wireless apparatus at least by said second modulation method of said two types of modulation methods;

a parameter measuring unit (demodulator) configured to measure said parameter based on a signal received from said another wireless apparatus;

a parameter comparing unit 42 configured to compare, when there is a connection request from said another wireless apparatus to the wireless apparatus, said stored first threshold value of the parameter corresponding to said second modulation method with said measured parameter; (Col.6 line 28-48) and

However, the Honcharenko reference does not specifically disclose wherein a channel allocation determining unit configured to reject when it is determined by said parameter comparing unit that said measured parameter is lower than said stored first

threshold value of the parameter, allocation of a wireless channel to said another wireless apparatus, irrespective as to whether or not communication is actually done under the second modulation method.

The Ishikawa reference however discloses in Col.9 line 45-62 wherein a channel allocation operation described as a accept/reject judgment of the selected radio channel at step S4. Reception level or various methods can be used to be compared to a threshold for such a judgment. And wherein such a threshold is not met, the channel is blocked from such a request.

It would have been obvious to one of ordinary skill in the art to implement the channel allocation operation of Ishikawa to the Honcharenko teaching in order to provide an option of rejecting incoming signals which do not meet the threshold indication as well as just accepting signals which do meet threshold requirements.

With respect to claims 2, 7, and 12, Honcharenko discloses the wireless apparatus method, and program according to claim 1, 6, and 11 Honcharenko continues to disclose wherein said storing means stores in advance a second threshold value of a parameter indicative of communication environment of transmission path, at which the wireless apparatus can communicate with another wireless apparatus by said first modulation method; and when there is a connection request from another wireless apparatus that supports said first modulation method but not said second modulation method to the wireless apparatus, said parameter comparing means compares said stored second threshold value of the parameter corresponding to said first modulation

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method with the parameter measured by said parameter measuring means, and when it is determined by said parameter comparing means that said measured parameter is not lower than said stored second threshold value of the parameter, said channel allocation determining means permits allocation of a wireless channel to said another wireless apparatus that supports said first modulation method but not said second modulation method. (Col.3 line 14-51)

With respect to claim 3, 8, and 13, Honcharenko discloses the wireless apparatus, method, and program according to claim 1, 5, and 11 Honcharenko continues to disclose wherein said channel allocation determining means determines presence/absence of any empty slot and empty channel in the wireless apparatus, and when there is no empty slot or empty channel, rejects allocation of a wireless channel regardless of the result of comparison by said parameter comparing means. (Col.3 line 57-Col.4 line 2)

With respect to claim 4, 9, and 14, Honcharenko discloses the wireless apparatus, method, and program according to claim 1, 5, and 11 Honcharenko continues to disclose further comprising means for notifying another wireless apparatus requesting connection to the wireless apparatus about rejection of channel allocation, when said channel allocation determining means rejects allocation of the wireless channel. (Col.3 line 57-Col.4 line 2)

With respect to claim 5, 10, and 15, Honcharenko discloses the wireless apparatus, method, and program according to claim 1, 5, and 11 Honcharenko continues to disclose wherein the parameter is based on a reception signal level from another wireless apparatus requesting connection to the wireless apparatus. (Col.3 line 19-24)

With respect to claims 16, 18, and 20, Honcharenko discloses the wireless apparatus, method, and program according to claim 1, Honcharenko continues to disclose wherein wireless apparatus initially establishes the wireless connection with the another wireless apparatus using the first modulation method (QPSK), wherein said parameter measuring unit (demodulator) periodically measures said parameter indicative of the communication environment (SNR value) of the transmission path, and wherein, when the parameter indicative of the communication environment (S/R value) of the transmission path is greater than the first threshold value, the wireless connection between the wireless apparatus and another wireless apparatus is switched from the first modulation to the second modulation method (QAM). Step 6 (Col.6 line 31-62)

Allowable Subject Matter

2. Claims 17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claims 17, the prior art discloses the wireless apparatus of claim 1, however the prior art of record does not specifically disclose wherein said parameter measuring unit measures said parameter indicative of the communication environment of the transmission path based only on a synchronization burst signal received by said wireless apparatus that is output by said another wireless apparatus.

With respect to claim 19, the art discloses the channel allocation method according to claim 6, however the prior art of record does not specifically disclose wherein said parameter measuring unit measures said parameter indicative of the communication environment of the transmission path based only on a synchronization burst signal received by said wireless apparatus that is output by said another wireless apparatus.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD CHAN whose telephone number is (571)272-0570. The examiner can normally be reached on Mon - Fri (9AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard Chan/
Examiner, Art Unit 2618

/Nay A. Maung/
Supervisory Patent Examiner, Art
Unit 2618